D-75

D SERIES

The Crown D-75 power amplifier is one of the standards for long-term-use amplifiers and is used wherever audio is found—in the lab, on the road, in the home and in the studio.

Designed, built and carefully checked to assure reliable operation into a wide variety of loads, the D-75 is especially appropriate for systems where cost is a primary concern, since its high reliability can be especially important in reducing start-up and maintenance costs.

The D-75 provides 35 watts per channel minimum RMS (both channels operating) into an 8 ohm load over a bandwidth of 20 Hz-20 kHz with a rated total harmonic distortion of not more than 0.05% of the fundamental output voltage. The frequency response of the unit varies no more than ±0.1dB from 20 Hz-20 kHz at 1 watt into 8 ohms. The D-75 requires only 1¾" (4.45 cm) of vertical rack space and includes such features as active balanced inputs, XLR connectors, an easily accessible mono-stereo switch, and front panel LEDs indicating distortion and signal presence. A special feature of the D-75 is the provision for isolating chassis ground from electrical ground.

Like all Crown amplifiers, the D-75 offers traditional Crown durability and a full 3-Year No-Fault Warranty.[1]

Specifications

Feature Summary

Distortion Indicator: Advanced *IOC*® (Input/Output Comparator) alerts the user in the unlikely event that distortion of any kind exceeds 0.05%.

Exceptionally Low Distortion: AB+B design results in very low distortion.

Bridged-Mono Mode: Bridged-Mono mode is provided for double output voltage.

Compact Size: Occupies only 1.75 inches of vertical equipment rack space.

No-Fault Warranty: A 3-year standard "No-Fault" warranty[1] which may be extended for an additional three years. Includes round-trip shipping.

Performance

Note: The following performance measurements were made in Dual (stereo) mode with both channels driven into an 8 ohm load.

Frequency Response: ±0.1 dB from 20 Hz to 20 kHz at 1 watt.

Phase Response: +10°, –15° from 20 Hz to 20 kHz at 1 watt.

Signal to Noise Ratio: 106 dB (20 Hz to 20 kHz) at full output.

Total Harmonic Distortion (THD): <0.001% from 20 Hz to 400 Hz and increasing linearly to 0.05% at 20 kHz at 35 W.

Intermodulation Distortion (IMD): <0.05% from 10 mW to 0.25 W and <0.01% from 0.25 W to 35 W.

Slew Rate: 6 V per microsecond.

Damping Factor: >400 from DC (0 Hz) to 400 Hz.

Power

Output Power

Note: Maximum average power at 1 kHz with 0.1% THD.

Dual (stereo): 55 W per channel into 4 ohms. 40 W into 8 ohms.

Bridged-Mono: 110 W per channel into 8 ohms. 80 W into 16 ohms.

Load Impedance: Rated for 16, 8, 4 ohm use. Safe with all types of loads, even reactive ones.

Required AC Mains: 50-400 Hz AC with selectable transformer taps for 100, 120, 200, 220 and 240 V (±10%) operation.

AC Line Connector: Standard three-wire grounded connector.

Controls

Power: A two-position rotary switch located on the front panel to turn the amplifier on and off.

Level: A level control for each channel, located on the front panel.

Dual-Mono: A two-position switch located on the back panel selects between Dual (stereo) and Bridged-Mono modes of operation.

Indicators

IOC: Normally off, these red indicators flash in the rare event the output waveform differs from that of the input by 0.05% or more.

Signal: These green indicators flash synchronously with the input signal to show its presence.

Input/Output

Input Connector: Balanced 3-pin XLR connector and unbalanced ¼-inch phone jack for each channel.

Input Impedance: Nominally 20 K ohms for balanced XLR inputs, 10 K ohms for unbalanced XLR use, and 25 K ohms for the unbalanced phone jack inputs.

Input Sensitivity: 0.812 V ±2 % for rated power into 8 ohms.

Output Connector: Color coded binding posts (banana jacks).

Output Impedance: <15 milliohms in series with <3 microhenries.

Construction

All aluminum construction for maximum heat conduction and minimum weight. Satinized aluminum front panel with gray suede Lexan insert.

Dimensions: 19 in. (48.3 cm) wide, 1.75 in. (4.5 cm) tall, 8.375 in. (22.3 cm) deep behind front mounting surface.

Weight: 10 lbs (4.53 kg).

Mounting: Standard EIA 310 front-panel rack mounting.

[1] Please contact a Crown representative for full details.

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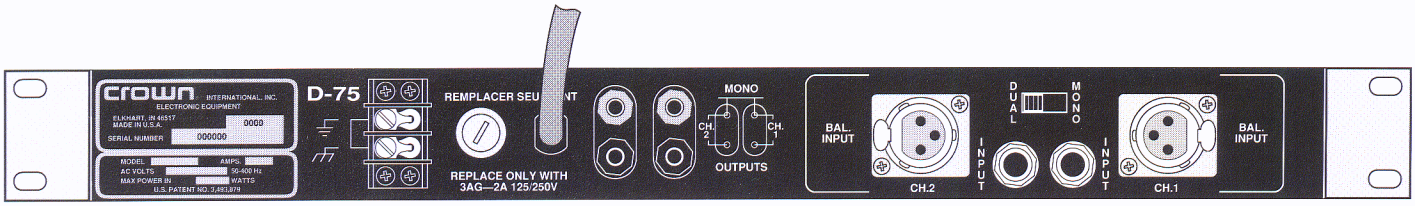

Configuration & Load (ohms)		FTC Continuous Average Power at 0.1% THD (See note 1)		Max Average Power at 0.1% THD (See note 2)	Single Cycle Tone Burst Watts at <0.05% THD (See note 3)			40 mS Tone Burst Watts at <0.05% THD (See note 4)			EIA Watts at 1% THD (See note 5)
		20 Hz-20 kHz	1 kHz	1 kHz	20 Hz	50 Hz	1 kHz	20 Hz	50 Hz	1 kHz	1 kHz
Stereo (both channels powered)	4	45	50	55	65	85	120	65	70	70	55
	8	35	40	40	45	50	60	45	45	45	40
	16	25	25	25	25	30	30	25	25	25	25
Bridged-Mono (balanced output)	8	95	105	110	140	165	235	140	140	140	105
	16	70	75	80	90	100	130	90	90	95	75

Crown's 3-Year No-Fault Amplifier Warranty And 3+3 No-Fault Extended Warranty

Crown International now offers a 3-Year No-Fault Warranty for every new Crown amplifier—an industry standard. With this unprecedented No-Fault protection, your new Crown amplifier is warranted to meet or exceed original specifications for the first three years of ownership. During this time, if your amplifier fails *for any reason* or does not perform to original specifications, it will be repaired or replaced at our expense. This includes parts, labor and round-trip shipping, even a shipping carton should you need one. About the only things not covered by this warranty are those losses normally covered by insurance and intentional abuse. And the coverage is transferable should you ever decide to sell your amp.

That's not all; for a modest fee, Crown will extend that protection for an additional three years with our 3+3 No-Fault Extended Warranty. Now that's commitment.

See your Crown dealer for full warranty disclosure and details on the No-Fault and 3+3 No-Fault Extended Warranty.

Architect/Engineer's Specifications

The power amplifier, being of two channels, shall deliver a minimum of 35 watts into 8 ohms each with both channels operating, or 45 watts into loads of 4 ohms each with both channels operating. When strapped into mono, it shall be capable of delivering 70 watts into a 16 ohm load or 95 watts in 8 ohm loads. The amplifier's outputs shall have internal protection against possible shorted, mismatched and open circuits. It shall provide instantaneous limiting with no annoying thumps or cutouts. The circuitry shall incorporate voltage amplifiers whose slew rate is controlled to protect the overall amplifier against RF burnout. The amplifier shall provide (in dual channel operation) a voltage gain of 20.6 ±2%, (or 26.3 ±0.2dB) at maximum gain, have an input sensitivity of 0.81 volts ±2% for full rated output and be capable of driving any load safely—including completely reactive loads. Hum and noise shall be 110dB below the rated output from 20 Hz to 20 kHz. Intermodulation distortion shall be less than 0.05% from 0.1 watt to 35 watt into 8 ohms (per channel). The dimensions shall allow for standard 19" (48.26 cm) EIA rack mounting. It shall be 1 3/4" (4.45 cm) high and 9" (22.86 cm) deep from the mounting surface. It shall weigh 10 lbs. (4.5 Kg) net. The power requirements shall be 50 to 400 Hz AC with adjustable taps for 120 or 240 V ±10%. At idle, the amplifier shall draw 15 watts or less maximum current draw. The amplifier shall be class AB+B and be of completely solid state design with a frequency response from 5 Hz-20 kHz, ±.1 dB at 1 watt into 8 ohms. The power amplifier shall be a Crown D-75.

1. Continuous power in the context of Federal Trade Commission testing is understood to be a minimum of five minutes of operation. Harmonic distortion is measured as the RMS sum total as a percentage of the fundamental output voltage. This distortion specification applies for all wattages greater than 0.25 watts.
2. A 1 kHz sine wave is presented to the amplifier and the output monitored for non-linear distortion. The level is increased until the THD reaches 0.1%. At this level the average power per channel is reported.
3. A single cycle of sine wave is presented to the amplifier and monitored for non-linear distortion. The average power during the burst is reported. Speakers must be able to withstand this level if they are to be safely used with this amplifier.
4. A 40 millisecond burst or two cycles of sine wave (whichever is of greater duration) is used and the power computed as the average power during the burst. The duty cycle of this test is 10 percent. This power level is a measure of how loud an amplifier is as perceived by the hearing process.
5. EIA standard RS-490 (both channels driven)

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